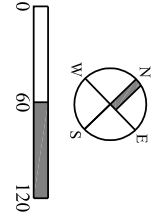
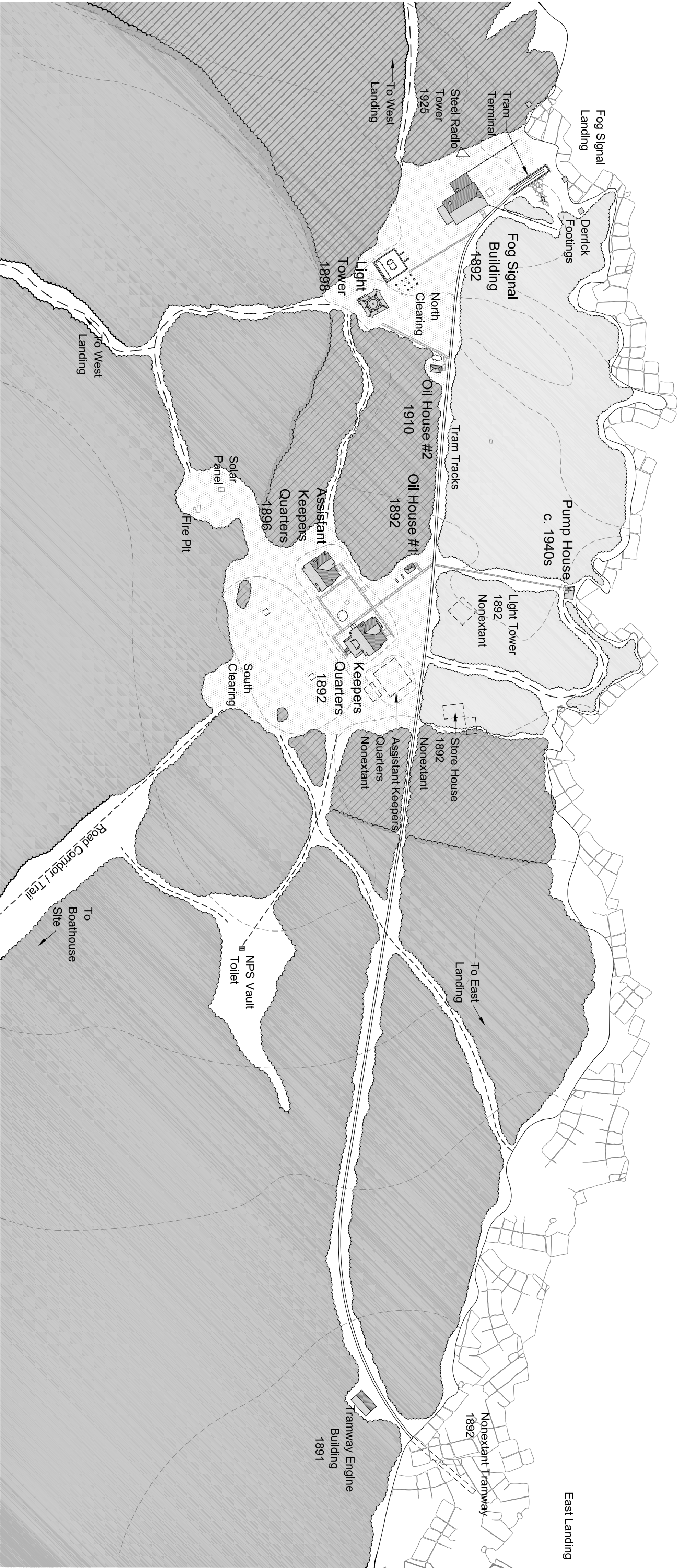
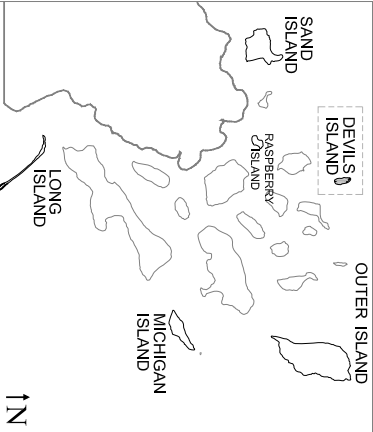
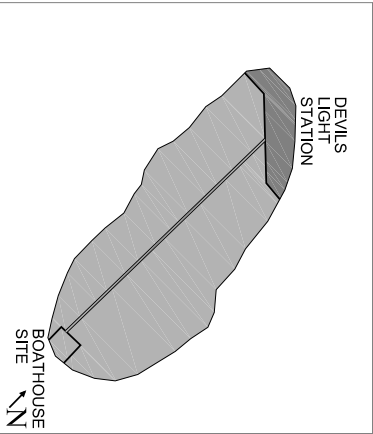
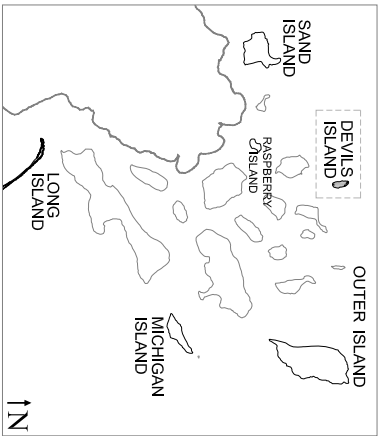


- LEGEND**
- Forest
 - Brush / Clearing
 - Encroaching Forest
 - Cliff
 - Tram Tracks
 - Nonextant Building or Landscape Feature

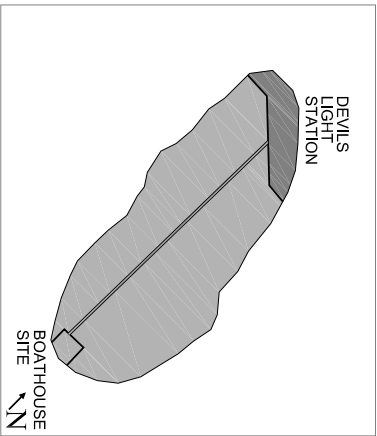


TITLE OF PROJECT CULTURAL LANDSCAPE REPORT	
UNITED STATES DEPARTMENT OF THE INTERIOR APOSTLE ISLANDS NATIONAL LAKESHORE	TITLE OF DRAWING DEVILS ISLAND LIGHT STATION & EAST LANDING NAME OF PARK APOSTLE ISLANDS NATIONAL LAKESHORE REGION MIDWEST COUNTY ASHLAND STATE WISCONSIN

SITE IMAGE D1-66



ISLAND KEY



DEVILS ISLAND

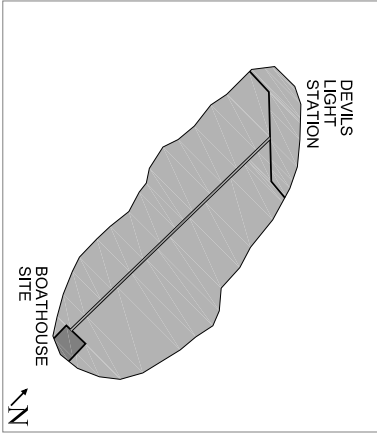
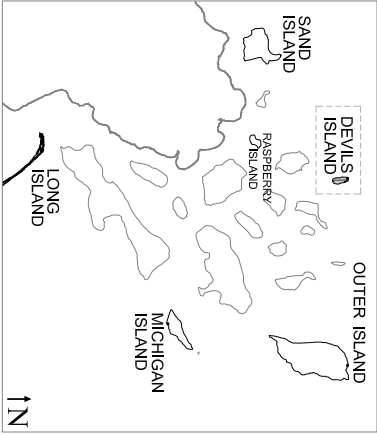
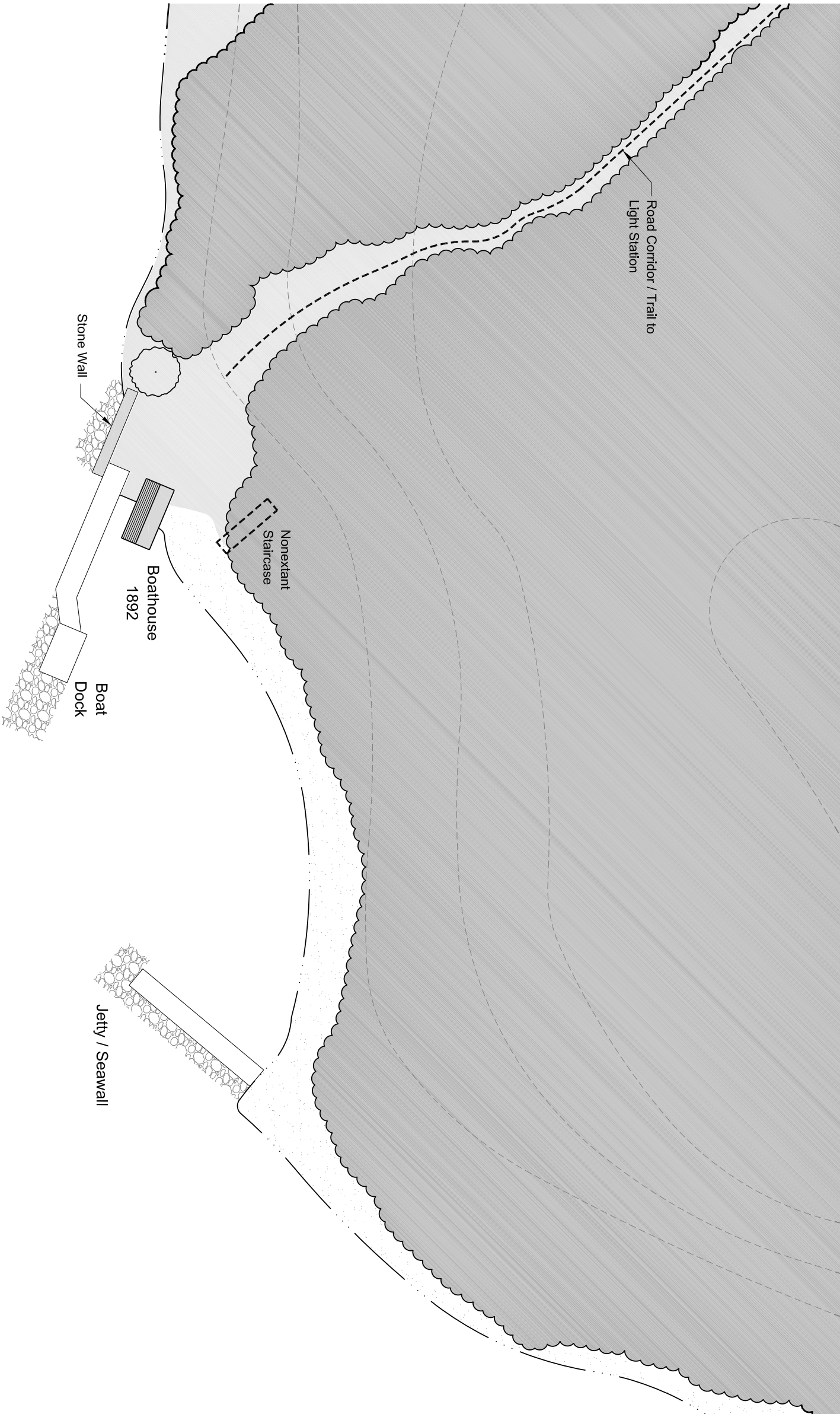
LEGEND

- Forest
- Brush
- Encroaching Forest
- Cliff
- Tram Tracks
- Nonextant Building or Landscape Feature



SITE IMAGE DI-67

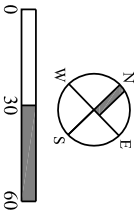
TITLE OF PROJECT CULTURAL LANDSCAPE REPORT		TITLE OF DRAWING DEVILS ISLAND LIGHT STATION	
EXISTING CONDITIONS		NAME OF PARK APOSTLE ISLANDS NATIONAL LAKESHORE	
UNITED STATES DEPARTMENT OF THE INTERIOR APOSTLE ISLANDS NATIONAL LAKESHORE		REGION MIDWEST	STATE WISCONSIN



- LEGEND
- Forest
 - Brush
 - Deciduous Tree
 - Stone Revetment
 - Beach
 - Lake Edge

SITE IMAGE DI-68

TITLE OF PROJECT		CULTURAL LANDSCAPE REPORT	
UNITED STATES		TITLE OF DRAWING	
DEPARTMENT OF THE INTERIOR		DEVILS ISLAND BOATHOUSE	
APOSTLE ISLANDS NATIONAL LAKESHORE		NAME OF PARK	APOSTLE ISLANDS NATIONAL LAKESHORE
		REGION	MIDWEST
		COUNTY	ASHLAND
		STATE	WISCONSIN



DEVILS ISLAND CLR TREATMENT

Introduction

The treatment section of the CLR in conjunction with the HSR describes a strategy for the long-term management of the cultural landscape and historic structures of the Devils Island Light Station. The strategy is based on the analysis of the cultural landscape's characteristics, the history and period of significance for the light station, the existing condition of the historic features, and contemporary use of the light station. A general management philosophy of rehabilitation has been identified as the most appropriate approach for the cultural landscape. Rehabilitation will allow for repairs, alterations, and additions that will be necessary for the compatible use of the light station, and will preserve the characteristics and features that convey the light station's historical, cultural and architectural values.²⁶ These actions will enable the park to preserve the contributing resources of the cultural landscape, while allowing for specific alterations to accommodate contemporary use and interpretation of its history.

TREATMENT GOALS

- Preserve extant contributing cultural resources
- Reestablish missing resources
- Reveal the cultural landscape by representing the important characteristics from the period of significance
- Improve the understanding of the overall system of light stations in the Apostle Islands for both visitors and park staff by incorporating interpretation of landscape resources that have been repaired or reestablished
- Aid in the preserving the natural resources of the light station reservation by monitoring and controlling invasive plant material, protecting rare and sensitive native plants and directing visitor use

TREATMENT TERMINOLOGY

The following terms are used frequently in the CLR for actions that address the cultural landscape and its features, and are defined below. A more detailed glossary is presented in the Glossary of Terms at the end of this volume.

Maintain. Maintain includes the standard maintenance practices (mowing, pruning, thinning of vegetation, painting and cleaning of small scale features) that are necessary to retain a features or area as a contributing resource. Maintenance activities are usually not classified as repair, however minor repair such as replacement of posts or railings or segments of paving are included.

Plant. Plant or planting includes the planting or removal and replanting of landscape material and vegetation as part of maintenance activities, or the restoration of missing landscape planting features.

Reestablish. The measures necessary to depict a feature or area as it occurred historically. Reestablish may include replacement of missing features (such as replacement of a pattern of planting) or a missing quality (e.g., reestablishment of a view).

²⁶ Landscape Lines.

Relocate. Relocate includes the removal and resetting of features in new locations. This is usually associated with noncontributing features.

Remove. The actions required to remove nonhistoric or noncontributing features. This is usually associated with noncompatible features in the landscape.

Repair. Repair includes the measures necessary to maintain features, components of features, and materials that require additional work. These may include repairing declining structures, small scale features (e.g., repair of a railing) or landscape plantings (e.g., repair mass planting by adding infill plantings). Features that are repaired shall match the original in design, color, texture, and where possible, material.

Restore. The measures necessary to depict a feature or area as it occurred historically. Restoration may include repair of a feature so that it appears as it did historically.

Retain. These are actions that are necessary to allow for a feature (contributing or noncontributing) to remain in place in its current configuration and condition.

Stabilize. Stabilize refers to immediate measures (more extensive than standard maintenance practices) that are needed to prevent deterioration, failure, or loss of features.

PREFERRED TREATMENT ALTERNATIVE

During the development of the CLR/HSR three treatment alternatives were produced and examined. The CLR/HSR contains only the Preferred Treatment Alternative. The additional treatment alternatives considered can be found in the Environmental Assessment.

Intent of Preferred Treatment Alternative

The Devils Island Light Station is most significant to the Apostle Islands system of light stations because of 1) its representation of the development of navigational aids along the outer shipping route to Ashland and Bayfield; 2) its clear depiction of improvements in navigational and light station technology; and 3) its history and relationship with the USCG. The lives of the keepers, their families, and later the USCG crews were impacted by the progression of new navigational technologies, made evident by the historic features of the cultural landscape. The light station's contributing features show a progression of new technologies and architecture on the station. The Devils Island Light Station is most significant to the Apostle Islands system of light stations because of the multiple landscape and building features that remain from the Coast Guard Period. By preserving, rehabilitating, or reestablishing these features, the treatment approach of the CLR/HSR strives to clearly depict the story of the Devils Island Light Station.

The intent of the preferred treatment is to rehabilitate the cultural landscape of the Devils Island Light Station to portray the period of navigational history that the light station best represents within the system. The period of significance for the Devils Island Light Station (1892 –1978) begins with the establishment of the first temporary wooden light tower, and ends with automation of the Light Tower. The extant contributing features best represent the Coast Guard period (1939–1978) when the light station was occupied and managed by the USCG (described in the Site Development section of this chapter). The USCG remained on site until 1978 and their influence on the cultural landscape is more evident at the Devils Island Light Station than any of the other Apostle Islands light stations. The treatment approach for the extant contributing features emphasizes this period. Recommendations also include the restoration of landscape features lost since the period of significance.

Preferred Treatment Alternative (Site Image DI- 70, Site Image DI-71)

The treatment measures are intended to preserve and rehabilitate the cultural landscape features. This requires a variety of actions that may be accomplished by either a series of preservation steps implemented over time or as a one-time action paired with future maintenance. Emphasis should be placed on the preservation and/or rehabilitation of the contributing features that most strongly define the character of the landscape as outlined above.

Specific treatment measures are depicted in a series of plan drawings and are accompanied by detailed narrative descriptions, organized by landscape characteristics and presented as follows.

SPATIAL ORGANIZATION/VIEWS AND VISTAS

Spatial organization is a key feature of the cultural landscape and is primarily defined at the Devils Island Light Station by the relationship between the buildings, structures, and cleared areas of the light station. While the arrangement of buildings, structures and circulation features have remained intact, with the exception of the removal of the wood-framed Assistant Keepers Quarters, the cleared area of the light station grounds has been substantially reduced from the period of significance. The encroachment of forest vegetation into the historic cleared area of the light station grounds has diminished the integrity of the light station by dividing the single historic cleared area into two smaller areas. Views from the waters of Lake Superior to the light station are also an important component of the cultural landscape. The growth and encroachment of forest vegetation, specifically trees, has also impacted views from the lake to the light station, although not to the extent found on other light stations. This encroachment of forest vegetation and change to the spatial organization of the light station has diminished the integrity of the cultural landscape.

Additional information regarding the means and methods of clearing forest vegetation are included in Volume I, Chapter 5: Management Issues and in the vegetation section.

The treatment recommendations for spatial organization and views/vistas include 1) preserving the existing organization of buildings, structures, and site features; 2) reestablishing the cleared area of the landscape to better depict its condition during the period of significance; and 3) maintaining the cleared corridor of the hiking trail to the Boathouse and the tram track corridor to the Tramway Engine Building. Individual treatment measures are described as follows:

Light Station Clearing and Maintenance

This measure is intended to reestablish the cleared area of the light station to a condition that better represents the period of significance, specifically the Coast Guard period (1939–1978). Clearing to reestablish portions of the cleared area may be undertaken on an incremental approach addressing the most critical and beneficial areas of clearing areas first. Emphasis should be placed areas that most strongly define the character of the landscape listed below in order of priority:

- Clearing for fire protection adjacent to existing buildings and structures;
- Clearing to prevent deterioration of contributing structures or small scale features such as the tram terminal;
- Clearing to reestablish the view between the Light Tower and Keepers Quarters;
- Clearing along the tram tracks between the Keepers Quarters and Tramway Engine Building;
- Clearing to maintain the connecting trail corridor between the Boathouse and light station;
- Clearing of forest west of Fog Signal Building.

CIRCULATION/ SITE ACCESSIBILITY

The circulation patterns and features on the site remain and are important elements of the cultural landscape. The circulation patterns are an integrated system of boat landings, roads/hiking trails, concrete walks and tram tracks. All of these improvements were installed to support the navigational and day-to-day operations of the light station. These features remain in much the same configuration as during the period of significance and are important to the integrity of the cultural landscape. The treatment measures focus on maintaining the circulation patterns and rehabilitating or preserving the circulation features. Features important to maintaining the integrity of the light station include the boat landing points, boat dock, road corridor/trail to Boathouse, tram tracks and concrete walks.

Tram tracks, concrete walks and all contributing trails and paths should be maintained in their current locations. Detailed recommendations for tram tracks and concrete walks are found in the structures and small scale features sections.

Trails and Paths

Maintain cleared corridors for all trails and footpaths on the light station. Trails are typically cleared and mowed to an approximate width of 8’.

Road Corridor

Maintain the former road corridor between the light station and the Boathouse area at the southern tip of the Island as a 10 foot-wide cleared corridor for a hiking trail. Clear and remove vegetation to maintain a corridor with clearance suitable for trail access. This corridor passes through the Gaylord Wilson Wilderness and any work shall meet all requirements and standards for the wilderness area.

Accessibility (ABAAS)

An accessibility analysis separate from the CLR/HSR is being developed to provide an overall plan for the six light stations in the Apostle Islands – Raspberry, Michigan, Outer, Devils, Long, and Sand islands. This work is intended to address the light station system as a whole and the accessibility requirements to be achieved at each individual light station. At the time of this report publication of the final accessibility report is in progress. The CLR/HSR incorporates several standard recommendations into each of the light station’s plans. Recommendations for the Devils Island Light Station are:

- Provide an outdoor accessible route (minimum 36” width) to a new accessible NPS restroom (location to be determined by the Park Service)

Outdoor accessible routes shall meet the requirements of the ABAAS for width (36” minimum), slopes (less than 4.75%), and include passing areas. These requirements are readily achievable on the light station. Further discussion regarding the overall accessibility approach for the system of light stations is included in Volume I, Chapter 5: Management Issues. Additional information regarding accessibility for individual buildings on the light station is included in the HSR following this CLR.

STRUCTURES

There are several important structures within the light station. These features convey important details regarding the historical use and operation of the light station. Treatment recommendations are described in detail for major structures. In general the recommendations for these features are focused on the preservation and maintenance of existing contributing structures.

Tram Tracks

Stabilize the tram tracks from the tram terminal near the Fog Signal Building to the Tramway Engine Building. This action is intended to carefully reveal this contributing feature and to reduce further deterioration of the resource. The tram tracks are an important organizing feature of the site and convey details about the historical operation of the light station. Remove vegetation and excess soil between and adjacent to the rails to insure that the pattern of the track and rails remains clearly visible on the landscape. Removal of vegetation and soil should be done with hand equipment with care taken to avoid over excavation and damage to any ties or material below. Maintain an approximate 10' wide cleared corridor along the tracks in the forested area between the Keepers Quarters and Tramway Engine Building. The intent of this clearing is to maintain an open view corridor along the tram tracks. The work includes clearing of vegetation and trimming of corridor edges. Do not to disturb any isolated wetlands that may occur along the tracks.

Tram Terminal

Repair the tram terminal near the Fog Signal Building. The intent of the treatment measures is to preserve and reveal the resource as an important feature in the cultural landscape. The feature is currently obscured by vegetation and may become damaged by root growth on top of and around the terminal. The treatment measures includes removal of vegetation (shrubs and trees) from the top of the terminal and adjacent to it; stabilization of extant tram tracks on terminal; and masonry repair (pointing) of all stone work. Replacement stone and mortar shall match existing material and craftsmanship.

Pump House

Treatment measures to maintain the pump house include:

- Provide secure weather proof cover at door opening
- Replace missing guardrails
- Secure roof hatch
- Seal any cracks or leaks in the concrete structure
- Retain the galvanized water supply line between the Pump House and Keepers Quarters.

Radio Beacon Tower

The steel radio beacon tower represents an important advance in navigational aids on Devils Island and within the Apostle Islands system of light stations. Maintain the radio tower in its current configuration and location. Treatment includes maintenance of concrete footings and painting of structural steel to minimize corrosion of frame and hardware. Clear vegetation around the tower to better incorporate the tower into the grouping of structures and provide better access.

Boat Dock

The boat dock should retain its current, historic location and configuration. The boat dock should be repaired as needed and determined by APIS. Maintenance and repair work shall match original materials, form and craftsmanship. Further discussion regarding boat docks is included in the Volume I, Chapter 5: Management Issues.

Boathouse

See the Historic Structure Report for information on the Boathouse.

Jetty/Seawall

Maintain the stone jetty in its current location and configuration. Replace rubble as needed.

SMALL SCALE FEATURES

The small scale features on the light station provide a human scale while conveying important details regarding the history and use of the light station. Treatment recommendations are described in detail for contributing small scale features, and noncontributing features are presented in Table DI-4. In general the recommendations for these features are focused on preservation and include:

- Retain all contributing small scale features.
- Retain noncontributing, compatible features including park and trail signs.
- Remove noncontributing, noncompatible features

Concrete Walks

Maintain all concrete walks in the current, historic locations. Repair includes the removal and replacement of several isolated, severely damaged sections. Maintenance includes vegetation removal and minor leveling to eliminate trip hazards. Replacement of damaged sections shall be completed with precast units matching the various dimensions of the existing concrete slabs, poured and finished prior to installation. The finish of the replacement sections should match the finish of the historic material including aggregate size and tooling.

Beacon Light Frame

Maintain the beacon light north of the Fog Signal Building by clearing vegetation around the light and repainting metal sections as needed to prevent corrosion.

Derrick Footings

Stabilize the concrete derrick footings near the Fog Signal Building. Remove vegetation from the edges of the footings and reset two of the footings to prevent them from falling into the water.

Fuel Tank Basin

Remove the fuel tank basin as it was installed outside of the period of significance.

Flagpole

Maintain the flagpole by repainting and replacing hardware and halyard as needed.

Park and Interpretive Signs

Measures related to park signage is not included in the CLR. Interpretive signage on the light station is addressed under the *Parks Long Range Interpretive Plan* and other studies. Additional discussion regarding interpretation is included in Volume I, Chapter 5: Management Issues.

Tramway Anchor

The tramway anchor on the rock outcrop east of the Tramway Engine Building is the only remaining extant piece of the tramway and should be preserved.

Stone Wall at Boathouse

Maintain the stone wall in its current location and configuration with minor mortar repair and protection of the wall base with riprap protection. Replacement stone and mortar shall match existing material and craftsmanship.

The following table (Table DI-4) provides recommendations for noncontributing small scale features.

Table DI-4. Small Scale Features (Noncontributing)

Feature	Compatible?	Status
Concrete Fuel Tank Basin	Noncontributing Compatible	Retain
Wood Marker	Noncontributing Compatible	Retain - further investigation required.
Septic Tanks (buried)	Noncontributing Compatible	Retain
Chain Link Fencing and Gate	Noncontributing Noncompatible	Remove chain link fencing
Solar Panel	Noncontributing Compatible location	Retain in existing location
Park Sign	Noncontributing Compatible	Not addressed in CLR
Fire Pit	Noncontributing Compatible location	Retain in existing location
Propane Tank	Noncontributing Compatible location	Retain in existing location

VEGETATION

Reservation Vegetation

Devils Island was not subject to extensive logging as entire island was set aside as a lighthouse reservation and was not commercially logged. Vegetation was disturbed by light station establishment and operations, but the overall composition of the vegetative communities was not changed. The northern two-thirds of Devils Island supports “classic boreal forest” dominated by white spruce, balsam fir, white cedar, white birch, and aspen. Clearing work shall not disturb old growth vegetation and shall maintain a buffer as determined by field investigations at the time of clearing work.

Areas of the light station reservation that are to remain forested should be monitored for invasive plants. The most apparent invasive plant is periwinkle (*Vinca minor*). This plant is thought to have been introduced as a domestic landscape plant on the light station. Do not introduce potentially invasive plant material into the light station reservation.

Station Vegetation

Remove forest vegetation that has encroached on light station grounds to better represent the light station during the period of significance. Clearing includes the removal of forest trees and shrubs in historically cleared areas, and the establishment of a low brush ecotype similar to what currently exists between the shoreline and tram tracks. The intent of the clearing is to reestablish the visual connection between the Light Tower and Fog Signal Building area and the Keepers Quarters and to maintain open views of the light station from Lake Superior. Cleared areas shall be maintained as low brush vegetation by manual removal of tree and large shrub species on a regular basis. Additional information regarding the means and methods of clearing forest vegetation from the light station and the disposal of clearing debris are included in Volume I, Chapter 5: Management Issues.

There are a number of state listed rare plants along the northern edge of the island including common butterwort (*Pinguicula vulgaris*) and bird’s eye primrose (*Primula mistassinaca*). Special care will need to be taken during landscape clearing to protect these species from any impacts.

Isolated wetland areas occur in several areas on the light station primarily in a small area along the tram tracks between the Keepers Quarters and Tramway Engine Building, and along the cleared trail corridor south of the light station. Wetland areas shall not be disturbed.

Domestic Plantings

Historically domestic landscape and garden plantings did not play a significant role in the cultural landscape of the Devils Island Light Station. Historic documents reference a vegetable garden planted at the Boathouse site.

- Maintain contributing domestic shrub and perennial plantings at Oil House #2
- Remove noncontributing trees in lawn areas near Keepers Quarters

Clearing for Fire Prevention

Maintain cleared areas free of trees a minimum of 30' from buildings (including the Tramway Engine Building).

Light Station Clearing (Lawn)

This treatment measure is a moderate expansion of the existing cleared lawn area. The work includes clearing of forest trees, shrubs and ground covers and establishing lawn grasses in the newly cleared area. Maintenance includes regular mowing of the lawn area to discourage forest encroachment.

Historic Vegetation Photograph



Site Image DI-69: Historic photograph of low brush condition at the Devils Island Light Station, c. 1901; (Source: NPS APIS Archives)

AREAS OF FURTHER INVESTIGATION

Archeological Investigations

Complete an archeological survey for all known resources in the light station reservation using nondestructive investigations to document the extent of buried or nonvisible cultural resources that exist across the Island. Consider using ground penetrating radar and other noninvasive measures to assist in locating resources. If a comprehensive survey for the entire Island is not possible, complete archeological investigations for proposed projects in advance of any other work on the project, including demolition. In compliance with the National Historic Preservation Act, and in consultation with the NPS Midwest Archeological Center, undertake archeological investigations for all projects, as appropriate to their scale, impacts, and extent of ground disturbance.